

CLAIMS

What is claimed is:

1. A mobile information system comprising:
a plurality of mobile units;
a subscription server in communication with said plurality of mobile units;

and

a client subscription manager operable on said subscription server for
compiling a data feed for each one of said plurality of mobile units, said data feed
comprising channel data for each one of a plurality of channels subscribed to by
each one of said plurality of mobile units.

2. The mobile information system of claim 1 further comprising:
one interactive multimedia runtime container (iMRC), operable on a
display of said plurality of mobile units, for said each one of said plurality of
channels subscribed to; and
a channel application, operable within said one iMRC, for presentation of
one of said plurality of channels subscribed to, wherein said channel application
presentation uses said channel data from said data feed to display one of said
plurality of channels subscribed to.

3. The mobile information system of claim 1 further comprising:
a navigation component on each of said mobile units for translating
navigation movements entered by a user into navigation signals, wherein said
navigation signals control at least one of:
navigation between ones of said plurality of channels; and
navigation within rich media information displayed within said
each one of said plurality of channels.

4. The mobile information system of claim 1 further comprising:
a user interface application for receiving input from a user related to at
least one of:

subscription to one or more of said plurality of channels; and
user preferences for information to be presented in said each of
said plurality of channels subscribed to.

5. The mobile information system of claim 1 further comprising:
a feed store located within each of said plurality of mobile units, wherein
said feed data is stored associated with each corresponding one of said plurality of
channels subscribed to.

6. The mobile information system of claim 5 wherein said channel
data stored in said feed store is accessible only by said each corresponding one of
said plurality of channels.

7. The mobile information system of claim 1 further comprising:
a signaling engine located within each of said plurality of mobile units,
wherein said signaling engine monitors for signals transmitted by said
subscription server.

8. The mobile information system of claim 7 wherein said signals
transmitted by said subscription server indicate availability of an updated data
feed.

9. The mobile information system of claim 8 wherein said mobile
device transmits a request for said updated data feed upon receipt of said signals.

10. The mobile information system of claim 1 further comprising:
a transaction manager located within each of said plurality of mobile units,
wherein said transaction manager transmits information received from a user to
said subscription server.

11. The mobile information system of claim 10 wherein said information received from said user comprises at least one of:
user preferences concerning display of plurality of channels subscribed to;
and
user requests for subscribing to another one of said plurality of channels.

12. The mobile information system of claim 1 further comprising:
a push engine for separating said data feed into data chunks corresponding to channel data for each one of said plurality of channels subscribed to.

13. The mobile information system of claim 1 wherein said channel application is downloaded from said subscription server on subscription to one of said plurality of channels.

14. The mobile information system of claim 13 wherein updates to said channel application are downloaded from said subscription server.

15. The mobile information system of claim 1 wherein said subscription server transmits one or more system feeds for providing system data.

16. The mobile information system of claim 15 wherein said system data provides channel data for displaying one or more system channels.

17. The mobile information system of claim 16 wherein said one or more system channels comprises one or more of:

a channel listing providing information on each of said plurality of channels available for subscription;
a headline channel for displaying a summary of each of said plurality of channels subscribed to, said summary displayed in a single channel;
a promotions channel for displaying one or more promotions directed to a plurality of subscribers to said mobile information system;
visual elements of said iMRC; and
a game channel.

18. The mobile information system of claim 16 wherein said one or more system feeds are accessible only by said one or more system channels.

19. A system for providing a plurality of rich media channels comprising:
a stream of channel data describing information presented in said plurality of rich media channels;
a mobile device receiving said stream of channel data, said mobile device comprising:
a display;
a rich media runtime container operable on said display;
a plurality of channel applications operable within said rich media runtime container, wherein each of said channel applications uses said channel data for presenting said information; and
a navigation element manually operable by a user to navigate through said plurality of rich media channels.

20. The system of claim 19 further comprising:
a channel data storage on said mobile device for each one of said plurality of rich media channels for storing current channel data associated with said each one of said plurality of rich media channels.

21. The system of claim 20 wherein access to said channel data associated with said each one of said plurality of rich media channels is restricted to said each one of said plurality of rich media channels.

22. The system of claim 20 further comprising:
a push engine application on said mobile device for separating said stream of channel data for each of said plurality of rich media channels and storing said separate channel data in said channel data storage.

23. The system of claim 19 further comprising:
a channel application storage on said mobile device for storing a rich media application defining the visual experience of each of said plurality of rich media channels.

24. The system of claim 23 wherein said stream of channel data also comprises application data defining said channel application.

25. The system of claim 24 wherein said application data one of:
updates said channel application; and
initiates said channel application.

26. The system of claim 19 further comprising:
a user interface for receiving input from a user relating to one of:
subscribing to one or more of said plurality of rich media channels;
unsubscribing to one or more of said plurality of rich media
channels subscribed to; and
user preferences of information presented in said one or more of
said plurality of rich media channels subscribed to.

27. The system of claim 19 wherein a first page of each of said
plurality of rich media channels subscribed to is sequentially displayed on said
display when no activity has been detected by a user for a predefined period of
time.

28. The system of claim 20 wherein a rich media subscription server
updates said channel data stored in said channel data storage.

29. The system of claim 28 wherein said updates are initiated by at
least one of:
said mobile device; and
said rich media subscription server.

30. The system of claim 29 wherein an option is presented to said user
for selecting an interval in which to poll said rich media subscription server for
said updates.

31. The system of claim 19 further comprising:
one or more streams of system data describing information related to
operation of said system, wherein said system data is accessible by one or more
system channels.

32. The system of claim 31 wherein said system data relates to at least
one of:
a discovery channel providing information on each of said plurality of rich
media channels available for subscription;
a now playing channel for displaying a summary of each of said plurality
of rich media channels subscribed to, said summary displayed in a single channel;
a promotions channel for displaying one or more promotions directed to a
plurality of subscribers to said mobile information system;
visual elements of said rich media runtime container; and
a game channel.

33. The system of claim 19 further comprising:
an information navigation element for navigating information presented in
said plurality of rich media channels.

34. A method for presenting a plurality of dynamic multimedia information channels (DMIC) on a mobile device comprising:
compiling a stream of data at a dynamic information subscription server, wherein said stream of data comprises channel data related to ones of said plurality of DMIC subscribed to by a user of said mobile device;
receiving said stream of data at said mobile device; and
running a channel program within an interactive multimedia runtime (iMR) on a display of said mobile device, wherein said channel program corresponds to each of said plurality of DMIC.

35. The method of claim 34 further comprising:
navigating through said each of said plurality of DMIC responsive to navigation movements received from a user of said mobile device; and
navigating through information presented in said DMIC responsive to in-channel navigation movements received from said user of said mobile device.

36. The method of claim 34 further comprising:
separating channel-specific data chunks of said channel data from said stream of data; and
populating said running channel program with channel data from said stream of data.

37. The method of claim 36 further comprising:
storing said channel-specific data chunks of said channel data on said mobile device.

38. The method of claim 37 further comprising:
restricting access to said channel-specific data chunks to corresponding ones of said plurality of DMIC.

39. The method of claim 34 further comprising:
presenting subscriptions options to said user for said plurality of DMIC; responsive to selections made by said user, communicating subscriptions selections to a multimedia information server.

40. The method of claim 39 further comprising:
downloading said channel application corresponding to ones of said
plurality of DMIC subscribed to by said user.

41. The method of claim 34 further comprising:
updating said channel data according to an update system; and
updating said channel application according to an update system.

42. The method of claim 41 wherein said update system comprises one
or more of:

receiving said updates directly from said dynamic information
subscription server when changes to one of said channel data and said channel
application are detected; and

receiving said updates responsive to a request from said mobile device,
wherein said request is issued according to one of:

an update available signal received from said dynamic information
subscription server; and

passing of a predetermined period of time.

43. The method of claim 42 wherein said user designates said
predetermined period of time.

44. The method of claim 34 further comprising:
receiving user preferences from said user at said mobile device; and
communicating said user preference to said dynamic information
subscription server for tailoring said stream of data to said user preference.

45. The method of claim 34 further comprising:
receiving one or more streams of system data at said mobile device; and
displaying one or more system channels using said system data.

46. The method of claim 45 further comprising:
restricting access to said system data to said one or more system channels.

47. The method of claim 45 wherein said one or more system channels comprise one or more of:

- a channel listing providing information on each of said plurality of channels available for subscription;
- a headline channel for displaying a summary of each of said plurality of channels subscribed to, said summary displayed in a single channel;
- a promotions channel for displaying one or more promotions directed to a plurality of subscribers to said mobile information system;
- visual elements of said iMR; and
- a game channel.

48. A method for experiencing interactive multimedia information on a mobile unit comprising:

interacting with a user interface of said mobile unit to subscribe to one or more channels having interactive multimedia content;

displaying one of said one or more channels on a display of said mobile unit; and

manipulating a navigational mechanism on said mobile unit to explore said interactive multimedia content on one of said one or more channels.

49. The method of claim 48 further comprising:

interacting with said user interface of said mobile unit to enter preferences applicable to said one or more channels subscribed to.

50. The method of claim 48 further comprising:

automatically receiving content updates for said one or more channels subscribed to.

51. The method of claim 50 wherein said automatically receiving comprises one or more of:

receiving said content updates directly from an enhanced subscription server when changes to one of said one or more channels is detected; and

receiving said content updates responsive to a request from said mobile unit, wherein said request is issued according to one of:

an update available signal received from said enhanced subscription server; and

passing of a predetermined period of time.

52. The method of claim 48 further comprising:

receiving a subscriber-specific stream of channel data from an enhanced subscription server; and

storing said channel data in a channel-specific memory address.

53. The method of claim 52 further comprising:
restricting access to said channel data to ones of said one or more channels
associated with said channel data.

54. The method of claim 52 further comprising:
using subscription information entered during said interacting to compile
said subscriber-specific stream of channel data.

55. The method of claim 52 further comprising:
using said preferences to compile said subscriber-specific stream of
channel data.

56. The method of claim 48 further comprising:
running an interactive multimedia runtime container (iMRC) for each of
said one or more channels displayed on said mobile unit.

57. The method of claim 56 further comprising:
combining said channel data and channel application logic in said iMRC
to display said one or more channels.

58. The method of claim 57 wherein said channel application logic
comprises one of:
application logic preexisting on said mobile unit; and
application logic downloaded from said enhanced subscription server upon
subscription to one of said one or more channels.

59. The method of claim 57 further comprising:
automatically receiving logic updates for said channel application logic.

60. The method of claim 48 further comprising:
receiving at least one stream of system channel data at said mobile unit;
and
displaying at least one system channel using said system channel data.

61. The method of claim 60 further comprising:
restricting access to said system channel data to said at least one system
channel.

62. The method of claim 60 wherein said at least one system channel
comprise at least one of:

- a channel listing providing information on each of said one or more channels available for subscription;
- a headline channel for displaying a summary of each of said one or more channels subscribed to, said summary displayed in a single channel;
- a promotions channel for displaying one or more promotions directed to a plurality of subscribers to said mobile information system;
- visual elements of said iMR; and
- a game channel.

63. A system for viewing interactive rich media information on a mobile device comprising:

means for interacting with a user interface of said mobile device to subscribe to plurality of rich media channels having rich media content;

means for displaying one of said plurality of rich media channels on a display of said mobile device; and

means for manipulating a navigation mechanism on said mobile device to explore said rich media content on one of said plurality of rich media channels.

64. The system of claim 63 further comprising:

means for interacting with said user interface of said mobile device to enter preferences applicable to said plurality of rich media channels subscribed to.

65. The system of claim 63 further comprising:

means for automatically receiving content updates for said plurality of rich media channels subscribed to.

66. The system of claim 65 wherein said means for automatically receiving comprises one or more of:

means for receiving said content updates directly from an enhanced subscription server when changes to one of said plurality of rich media channels is detected; and

means for receiving said content updates responsive to a request from said mobile device, wherein said request is issued according to one of:

an update available signal received from said enhanced subscription server; and

passing of a predetermined period of time.

67. The system of claim 63 further comprising:

means for receiving a subscriber-specific stream of channel data from an enhanced subscription server; and

means for storing said channel data in a channel-specific memory.

68. The system of claim 67 further comprising:
means for restricting access to said channel data to ones of said plurality
of rich media channels associated with said channel data.

69. The system of claim 67 further comprising:
means for using subscription information entered during execution of said
means for interacting to compile said subscriber-specific stream of channel data.

70. The system of claim 67 further comprising:
means for using said preferences to compile said subscriber-specific
stream of channel data.

71. The system of claim 63 further comprising:
means for running an interactive multimedia runtime container (iMRC) for
each of said plurality of rich media channels displayed on said mobile device.

72. The system of claim 71 further comprising:
means for combining said channel data and channel application logic in
said iMRC to display said plurality of rich media channels.

73. The system of claim 72 wherein said channel application logic
comprises one of:

application logic preexisting on said mobile device; and
application logic downloaded from said enhanced subscription server upon
subscription to one of said plurality of rich media channels.

74. The system of claim 72 further comprising:
means for automatically receiving logic updates for said channel
application logic.

75. The system of claim 63 further comprising:
means for receiving at least one stream of system channel data at said
mobile device; and
means for displaying at least one system channel using said system
channel data.

76. The system of claim 75 further comprising:
means for restricting access to said system channel data to said at least one
system channel.

77. The system of claim 75 wherein said at least one system channel
comprise at least one of:

- a channel listing providing information on each of said plurality of rich
media channels available for subscription;
- a headline channel for displaying a summary of each of said plurality of
rich media channels subscribed to, said summary displayed in a single channel;
- a promotions channel for displaying one or more promotions directed to a
plurality of subscribers to said mobile information system;
- visual elements of said iMR; and
- a game channel.